ABSTRACT

A novel permeability enhancing peptide (PEP) is a fragment of interleukin-2. When joined to a delivery vehicle that can target a tumor site, the PEP can increase the subsequent uptake of antineoplastic or tumor imaging agents. The PEP can be chemically joined to a monoclonal antibody to form an immunoconjugate. Alternatively, an expression vector is genetically engineered to express a fusion protein. The fusion protein has an antigen-binding portion joined to the PEP. The PEP is most effective when it takes the form of a dimer, linked by a disulfide bridge. The PEP is substantially free of cytokine activity and produces minimal toxic side effects on normal tissues.